| Inde | ex of Cl | aims |
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|      |          |      |

| Application/Control | No. |
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10/648,370

TANIGUCHI ET AL.

Applicant(s)/Patent under Reexamination

Examiner

Art Unit

Blake E. Betz

2672

| <b>√</b> | Rejected |
|----------|----------|
| 11       | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
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| 1 | Interference |

| Α | Appeal   |
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| 0 | Objected |

| Cla        | im       |          |            | _            | (                                      | Date         | e            |            |            |              |   | Cla      | im       |                  |              |                 | ( | Da       |
|------------|----------|----------|------------|--------------|--|--------------|--------------|------------|------------|--------------|---|----------|----------|------------------|--------------|-----------------|---|----------|
| Final      | Original |          |            |              |  |              |              |            |            |              |   | Final    | Original |                  |              |                 |   |          |
|            | 1        | 1        |            |              |  |              |              | :          |            |              |   |          | 51       |                  |              |                 |   | Т        |
|            | 2        | 1        |            |              |  |              |              |            |            |              |   |          | 52       |                  |              |                 |   |          |
|            | 3        | 1        |            |              |  |              |              | ·          |            |              |   |          | 53       |                  |              |                 |   |          |
|            | 4        | 1        |            |              | <u> </u>                               |              |              |            |            |              |   |          | 54       |                  |              |                 |   | L        |
|            | 5        | 1        |            | <u> </u>     | <u> </u>                               | L.           |              |            |            |              |   |          | 55       |                  |              |                 |   |          |
|            | 6        | 1        | _          |              | _                                      | _            |              | _          |            | L            |   |          | 56       |                  | Ц            | _               |   | _        |
|            | 7        | 1        |            |              |  |              | _            | :          | <u> </u>   | <u> </u>     |   |          | 57       |                  |              | _               |   | L        |
|            | 8        | 1        | _          |              | _                                      | _            | _            |            |            | _            |   |          | 58       | L                |              | _               |   | _        |
|            | 9        | 1        |            |              | 乚                                      | _            | L            | -          |            | _            |   |          | 59       |                  |              | _               |   | L        |
|            | 10       | V        |            |              |  |              | _            | Ŀ          | _          |              |   |          | 60       |                  |              |                 |   | L        |
|            | 11       | 1        |            |              | L                                      | _            | L_           | :          | _          | _            |   |          | 61       | _                |              |                 |   | L        |
|            | 12       | 1        |            |              |  |              | _            | :          | <u> </u>   | L            |   |          | 62       |                  |              |                 |   |          |
|            | 13       | 1        | <u> </u>   |              | <u> </u>                               | _            |              | :          | _          | <u> </u>     |   |          | 63       |                  | Ш            |                 |   | L        |
|            | 14       | 4        |            | _            |  |              |              | Ŀ          | <u>_</u>   |              |   |          | 64       |                  |              |                 |   | L        |
|            | 15       | 1        |            |              | L                                      |              | Ŀ            | 1          | _          |              |   |          | 65       |                  |              | Ш               |   | L        |
|            | 16       | 1        | _          |              |  |              | 匚            | _          | L          | _            |   |          | 66       | _                |              | Ц               |   | L        |
|            | 17       | 4        | _          |              | L                                      | <u> </u>     | <u> </u>     |            |            | _            |   |          | 67       | _                |              | $\sqcup$        |   | L        |
|            | 18       | 1        | _          | _            | _                                      | Ŀ            | _            |            |            | <u> </u>     |   |          | 68       | _                |              | $\Box$          | _ | L        |
| <u> </u>   | 19       | 1        |            |              | Ь.                                     |              |              | 1          |            |              |   |          | 69       |                  |              |                 |   | L        |
|            | 20       | 0        |            |              | 匚                                      |              | _            | _          | _          |              |   | <u> </u> | 70       |                  |              |                 |   | L        |
|            | 21       |          |            | _            |  | L.           | L            | _          | _          | <u>L</u> .   |   |          | 71       | _                | _            | $\perp$         |   | L        |
|            | 22       |          | <u> </u>   | $oxed{oxed}$ | _                                      | ļ            | _            |            | _          |              |   |          | 72       | _                |              | _               |   | L        |
|            | 23       | L.       | <u> </u>   | <u> </u>     | $oxed{oxed}$                           |              | _            | :          | <u> </u>   | _            |   |          | 73       |                  |              |                 |   | L        |
|            | 24       |          | _          |              | <u> </u>                               | _            | 乚            | L.         | <u> </u>   |              |   |          | 74       | _                | Ц.           |                 |   | L        |
|            | 25       |          | <u> </u>   | _            | L                                      | L            | 乚            | Ŀ          | L          | <u> </u>     |   |          | 75       | _                | _            |                 |   | L        |
| L          | 26       | _        |            |              | L                                      | <u> </u>     |              |            | ᆫ          | L_           |   |          | 76       |                  |              | Ц               |   | L        |
|            | 27       | _        | 匚          |              | <u> </u>                               | L            | <u> </u>     | <u> </u>   | $\vdash$   | L            |   |          | 77       | <u> </u>         | $oxed{oxed}$ | Ц               |   | _        |
|            | 28       | _        | <u> </u>   |              | L                                      | <u> </u>     |              |            | _          |              | 1 |          | 78       | _                | $oxed{oxed}$ | Ц               |   | L        |
|            | 29       | _        | 匚          |              | ┖                                      | <u> </u>     | L            | Ļ÷         | lacksquare |              |   |          | 79       | _                |              |                 |   | L        |
|            | 30       |          | <u> </u>   | <u> </u>     | <u> </u>                               | <u> </u>     | <u> </u>     | <u> </u>   |            | <u> </u>     |   | <u> </u> | 80       | L                |              | Ш               |   | L        |
| ļ <u>.</u> | 31       |          | _          | <u>L</u>     |  |              | <u> </u>     | :          | <u>L</u>   | <u> </u>     | 1 | <u> </u> | 81       | L                | _            | Ш               |   | L        |
|            | 32       | _        | <u> </u>   | <u> </u>     | <u> </u>                               | ļ            | <u> </u>     |            | <u> </u>   | _            |   | <u> </u> | 82       | _                |              | $\square$       | _ | Ļ        |
|            | 33       | L        | <u> </u>   | <u> </u>     | _                                      | <u> </u>     | ┖            | Ŀ          | L          | ╙            |   |          | 83       | L                |              | Щ               |   | L        |
|            | 34       |          | <u> </u>   | <u> </u>     | 乚                                      | _            | <u> </u>     | <u>:</u>   | <u> </u>   | <u> </u>     | 1 |          | 84       | _                |              | Ш               |   | L        |
|            | 35       | L_       | _          | _            | <u> </u>                               | L            | _            | 1          | L          | <u> </u>     |   |          | 85       | _                | _            |                 |   | _        |
|            | 36       | _        |            | <u>L</u>     | <u> </u>                               | <u> </u>     | _            | <u> </u> : | _          | <u> </u>     | 1 |          | 86       | <u> </u>         | <u> </u>     | Ш               |   | _        |
| <u> </u>   | 37_      | _        | lacksquare | Ц_           | _                                      | _            | <u> </u>     | :          | $\vdash$   | <u> </u>     |   |          | 87       | <u> </u>         | <u> </u>     | $\sqcup$        |   | L        |
|            | 38       | <u> </u> | L_         | <u> </u>     | <u> </u>                               | ↓_           | <del> </del> | ↓_         |            | <u> </u>     | 1 | <u> </u> | 88       | <u> </u>         | _            | Щ               |   | L        |
|            | 39       | L_       | <u> </u>   | <u> </u>     | <u> </u>                               | ــــ         | <u> </u>     | Ŀ          | _          | <u> </u>     | 1 | <u> </u> | 89       | $ldsymbol{oxed}$ | <b> </b>     | Ш               |   | L        |
| <u> </u>   | 40       | L_       | <u> </u>   | <u> </u>     | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | <b> </b>     | ╙            | ـ          |            | <u> </u>     | Į | <u></u>  | 90       | lacksquare       | Щ            | Щ               |   | L        |
|            | 41       | L        | _          | <u> </u>     | <u> </u>                               | <b> </b>     | <u> </u>     |            | _          | ┞            | 1 | <u> </u> | 91       | <u> </u>         | _            |                 |   | L        |
|            | 42       | L        |            | <u> </u>     | _                                      | ļ            | <u> </u>     | <u> </u>   | 1          | <u> </u>     | 1 | <u></u>  | 92       | <u> </u>         | <u> </u>     | Ц               |   | L        |
|            | 43       | _        | _          | <u> </u>     | <b>_</b>                               | <u> </u>     | ↓_           | ╀          | <u> </u>   | <u> </u>     | 1 | ļ        | 93       | <u> </u>         | <u> </u>     | $\sqcup$        |   | 1        |
| <u> </u>   | 44       | <b> </b> | <u> </u>   | $\vdash$     | _                                      | _            | $\vdash$     | ٠.         | ļ          | _            | 1 | <u></u>  | 94       | <u> </u>         | <u> </u>     | $\vdash \vdash$ |   | L        |
| <u></u>    | 45       | <u> </u> | <u> </u>   | <b>!</b>     | <u> </u>                               | _            | 1            | 1          | $\vdash$   | _            | 1 | <u> </u> | 95       | <u> </u>         | -            |                 |   | $\vdash$ |
| L          | 46       | <u> </u> | <u> </u>   | ┞            | 1_                                     | ₩            | 1            |            | ┞          | <del> </del> | 1 |          | 96       | ₽                | _            | Ш               |   | Ł        |
|            | 47       | <u> </u> | <u> </u>   | <u> </u>     | 1                                      | ┞-           | 1            |            | 1          | $\vdash$     | 1 |          | 97       | ┡                | _            | Ш               | _ | 1        |
| L          | 48       | $\vdash$ | _          | -            | 1_                                     | <del> </del> | 1_           | 1          | 1          | <del> </del> | 1 | <u> </u> | 98       | <del> </del>     | L-           | _               |   | Ļ        |
| <u></u>    | 49       | <u> </u> | 1          | 1            | 1                                      | _            | _            |            | ـ          | 1            | - | $\vdash$ | 99       | <b>├</b> -       | <u> </u>     | Ш               |   | Ļ        |
|            | 50       | oxdot    |            | L            | <u>L.</u>                              | <u>L.</u>    | <u>L.</u>    | <u>L</u>   | 丄          | <u>L</u>     | ] |          | 100      | _                | L_           |                 |   | L        |

| Cla      | Claim                      |          |              | Date     |  |          |                |  |              |            |  |  |  |  |
|----------|----------------------------|----------|--------------|----------|--|----------|----------------|--|--------------|------------|--|--|--|--|
|          |                            |          |              |          |  |          |                |  |              |            |  |  |  |  |
| <u>a</u> | Original                   |          |              |          |  |          |                |  |              |            |  |  |  |  |
| Final    | įģ                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
| -        | ō                          |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          |                            |          | -            | -        |  |          | -              |  | -            | _          |  |  |  |  |
| -        | 21                         | $\dashv$ | $\dashv$     | _        | _  |          |                |  | -            |            |  |  |  |  |
|          | 51<br>52<br>53             | _        |              |          |  |          | $\Box$         |  |              |            |  |  |  |  |
|          | 53                         | _        | _            |          | _  |          | _              |  |              | _          |  |  |  |  |
|          | 54                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 55                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 56                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 57                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 58<br>59                   |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 59                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 60                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 61                         |          | _            |          |  |          |                |  |              |            |  |  |  |  |
| -        | 62                         | $\vdash$ |              | _        |  |          | $\vdash$       | _  |              |            |  |  |  |  |
| -        | 62                         | -        | -            |          |  |          | Н              | _  | _            |            |  |  |  |  |
|          | 63                         | -        | _            |          |  |          | -              |  | _            |            |  |  |  |  |
| -        | 64                         | -        |              |          |  |          | -              |  | _            | _          |  |  |  |  |
|          | 65                         |          |              |          |  |          |                |  | _            |            |  |  |  |  |
|          | 66<br>67                   |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 67                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 68                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 69                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 70                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 71                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 71<br>72<br>73<br>74<br>75 |          |              |          |  |          |                |  |              |            |  |  |  |  |
| 1        | 73                         |          | _            |          |  | $\vdash$ |                | _  | _            |            |  |  |  |  |
|          | 74                         | H        | _            |          | $\vdash$   |          |                |  |              | _          |  |  |  |  |
|          | 75                         |          | $\vdash$     |          | $\vdash$   | -        |                | -  | $\vdash$     | -          |  |  |  |  |
| -        | 75                         |          | _            |          |  |          |                |  | ⊢            |            |  |  |  |  |
|          | 76                         | _        | _            | _        |  |          |                | -  | -            | _          |  |  |  |  |
|          | 77<br>78<br>79             | _        | _            | _        | ┝  |          | _              | _  | <u> </u>     | _          |  |  |  |  |
|          | 78                         | _        |              | _        | <u> </u>   |          | -              | ļ  |              |            |  |  |  |  |
|          | 79                         |          |              |          | _  |          | _              |  | L.,          |            |  |  |  |  |
| <u> </u> | 80                         |          |              |          | _  |          | L              |  |              | L.         |  |  |  |  |
|          | 81                         |          |              |          |  |          | L              |  |              |            |  |  |  |  |
| L        | 82<br>83                   |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 83                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 84                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 85                         |          |              |          |  |          |                |  |              |            |  |  |  |  |
|          | 86                         | $\vdash$ | $\vdash$     | $\vdash$ |  | $\vdash$ |                |  | -            |            |  |  |  |  |
|          | 87                         | <u> </u> | $\vdash$     | $\vdash$ | $\vdash$   | _        |                | <del>                                     </del> | <b></b>      |            |  |  |  |  |
| -        | 88                         | $\vdash$ | $\vdash$     | -        | H  | <u> </u> | $\vdash$       | $\vdash$   |              | -          |  |  |  |  |
| -        | 89                         | -        | <del> </del> | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$       | -  | -            | -          |  |  |  |  |
| -        | 90                         | $\vdash$ | -            | $\vdash$ | $\vdash$   | -        | -              | $\vdash$   | $\vdash$     | -          |  |  |  |  |
|          | 04                         | $\vdash$ | $\vdash$     | $\vdash$ | ├─   | -        | <del> </del>   | -  | <del> </del> |            |  |  |  |  |
| <u> </u> | 91                         | <u> </u> | <u> </u>     | <u> </u> | <del> </del>   | -        | <u> </u>       | $\vdash$   | $\vdash$     | ├          |  |  |  |  |
|          | 92                         | <u> </u> | <u> </u>     |          | ⊢  | <u> </u> | <del>  -</del> |  | <del> </del> | <u> </u>   |  |  |  |  |
|          | 93                         | ļ_       | <b> </b>     |          | <u> </u>   | <u> </u> | <u> </u>       | _  | ₩            | <b> </b> _ |  |  |  |  |
| <u> </u> | 94                         | <u></u>  | <u> </u>     | L        |  | <u> </u> | <u> </u>       | L_   | <u> </u>     | <u> </u>   |  |  |  |  |
|          | 95                         | $oxed{}$ | _            |          | $ldsymbol{ldsymbol{ldsymbol{ldsymbol{ldsymbol{L}}}}$ | 匚        | _              |  |              | <u> </u>   |  |  |  |  |
|          | 96                         |          |              | L        |  |          |                |  |              | L          |  |  |  |  |
|          | 97                         |          |              |          |  |          |                | <u> </u>   | Γ            |            |  |  |  |  |
|          | 98                         | П        | Г            | П        |  |          |                |  |              | Π          |  |  |  |  |
|          | 99                         | $\vdash$ | _            | _        |  | Т        |                |  |              | <u> </u>   |  |  |  |  |
|          | 100                        | $\vdash$ | $\vdash$     | Η-       | $\vdash$   | -        | $\vdash$       | $\vdash$   | -            | ┢          |  |  |  |  |

| Cla  | aim                      | Date   |  |              |  |              |  |          |  |                |  |  |
|--|--------------------------|--|--|--------------|--|--------------|--|----------|--|----------------|--|--|
|  | 1 1                      |  |  |              |  |              |  |          |  |                |  |  |
| Final  | Original                 |  |  |              |  |              |  |          |  |                |  |  |
|  | 101                      |  | -  |              |  | Н            | $\neg$   |          |  | $\dashv$       |  |  |
| $\vdash$   | 102                      |  |  |              |  |              |  |          |  | $\neg$         |  |  |
|  | 101<br>102<br>103        |  |  |              |  |              |  |          |  |                |  |  |
|  | 104                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 104<br>105<br>106        |  |  |              |  |              |  |          |  |                |  |  |
|  | 106                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 107                      |  |  |              |  |              |  |          |  |                |  |  |
| <u> </u>   | 107<br>108<br>109        |  |  |              | ļ.,.   |              |  |          |  |                |  |  |
|  | 109                      |  |  |              |  | _            |  |          |  |                |  |  |
|  | 110                      |  |  |              |  | Ш            |  |          |  |                |  |  |
|  | 111                      |  | _  |              |  |              |  |          |  | _              |  |  |
| <u> </u>   | 112<br>113               |  | $\Box$   |              |  | $\vdash$     |  |          |  | Щ              |  |  |
| <u> </u>   | 113                      | <u> </u>   | $\dashv$   |              |  | H            |  |          | ļ  | Н              |  |  |
| $\vdash$   | 114<br>115<br>116<br>117 | —  | -  |              |  | Н            | $\vdash$   |          | <u> </u>   | $\vdash\vdash$ |  |  |
| -  | 115                      |  | $\vdash$   |              |  | -            |  | _        | —  | -              |  |  |
|  | 117                      |  |  |              | -  |              |  |          | _  | $\dashv$       |  |  |
| <u> </u>   | 118                      |  | -  | _            | -  | Н            |  |          | -  | -              |  |  |
| <u> </u>   | 118<br>119<br>120        | -  | -  |              |  | $\vdash$     |  |          |  |                |  |  |
| _  | 120                      | _  |  |              |  |              | _  |          | -  | $\vdash$       |  |  |
| <del>                                     </del> | 121                      | -  |  |              |  |              |  |          | _  | Н              |  |  |
|  | 121<br>122               |  | $\Box$   |              |  | $\vdash$     |  |          |  |                |  |  |
|  | 123                      |  |  |              |  |              |  | _        | _  | П              |  |  |
|  | 123<br>124<br>125        | $\vdash$   | П  |              |  |              |  | _        |  | П              |  |  |
|  | 125                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 126                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 127                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 126<br>127<br>128        |  |  |              |  |              |  |          |  |                |  |  |
|  | 129<br>130               |  |  |              |  |              |  |          |  |                |  |  |
|  | 130                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 131<br>132               |  |  |              |  |              |  |          |  |                |  |  |
|  | 132                      |  |  |              |  |              | _  |          |  | Ш              |  |  |
| <u> </u>   | 133                      |  |  |              |  |              |  |          |  |                |  |  |
|  | 134                      | <u> </u>   |  |              |  | _            | _  | <u> </u> | <u> </u>   | Ш              |  |  |
|  | 135                      | <u> </u>   | Ш  | ļ.,          |  | ⊢            |  | _        | <u> </u>   | <u> </u>       |  |  |
| <u> </u>   | 136                      | _  | _  | _            | <u> </u>   | <del> </del> | <u> </u>   | -        | -  | -              |  |  |
| <u> </u>   | 137<br>138               | <u> </u>   |  |              | -  | -            | <u> </u>   | ├-       | ⊢  |                |  |  |
| <u> </u>   | 138                      | $\vdash$   | $\vdash$   | $\vdash$     | $\vdash$   | -            |  | <u> </u> | <u> </u>   | $\vdash$       |  |  |
| <del></del>                                      | 139<br>140               | ├  | $\vdash$   | $\vdash$     | ├-   | -            | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$       |  |  |
| -  | 141                      | $\vdash$   | -  | -            | ├  | $\vdash$     | -  | $\vdash$ | -  | -              |  |  |
| -  | 142                      | $\vdash$   | -  | $\vdash$     |  |              |  | $\vdash$ | $\vdash$   |                |  |  |
|  | 143                      | <del> </del>                                     |  | <del> </del> | <del>                                     </del> | -            | $\vdash$   | $\vdash$ | <del>                                     </del> | $\vdash$       |  |  |
| _  | 144                      | <del>                                     </del> | $\vdash$   | $\vdash$     | $\vdash$   | $\vdash$     | -  | ╁        | <del> </del>                                     | $\vdash$       |  |  |
|  | 145                      | ┢  | <del>                                     </del> | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$       |  |  |
|  | 146                      |  | _  |              |  | $\vdash$     | $\vdash$   | $\vdash$ | T  |                |  |  |
|  | 147                      |  | <del>                                     </del> | $\vdash$     |  | $\vdash$     | <del>                                     </del> | $\vdash$ |  |                |  |  |
|  | 148                      |  |  | Г            |  | <u> </u>     |  | Г        | Г  |                |  |  |
|  | 149                      |  | Г  | Г            |  | Π            | Г  | Г        |  | Г              |  |  |
|  | 150                      | Γ  |  | Г            |  |              |  |          |  |                |  |  |